

Related Job Titles:

Computer **hardware** engineer, electronics engineer, computer scientist

Job Description:

Computer **engineers** design and develop computers or robots. When designing a new product, **engineers** first figure out what it needs to do. They then design and test the parts, fit the parts together and test to see how successful it is. They also write reports on the product. Most **engineers** work in office buildings or laboratories. Some must travel to different work sites.

Interests / Abilities:

- Are you good at math?
- Are you creative?
- Is your work detailed?
- Do you like to solve problems?
- Are you interested in how things work?
- Do you like working with computers?
- Are you good at working with a team?

Suggested School Subjects / Courses:

- Mathematics
- Science (**physics**)
- **Engineering** (**computer electronics**, electrical, mechanical, **systems engineering**)
- Computers programming
- Social studies (history)
- English (writing)

Education / Training Needed:

The minimum education required for this position is a **bachelor's degree** in computer **engineering** or a related subject from an accredited **college** or **university**. To do research, a **Ph.D.** is highly desired for this position.

Areas of Expertise:

- **Computer hardware**: design and develop computer equipment
- **Robotics**: design and develop robots

Additional Resources:

- IEEE Computer Society
<http://www.computer.org>
- Institute for Certification of Computing Professionals (ICCP)
<http://www.iccp.org>
- Order NASA career videos such as "Engineers: Turning Ideas into Reality," "Careers: Aerospace Engineer" or "Reaching for the Stars" from NASA CORE.
<http://core.nasa.gov>
- Robotics Education
<http://robotics.arc.nasa.gov>
- Junior Engineering Technical Society
<http://www.asee.org/jets>
- Accreditation Board for Engineering and Technology, Inc.

What can I do right now?

- Read magazines like *MacWorld*, *Byte*, *PC World*.
- Join a computer club.
- Take as many math, science and computer classes as you can.
- Participate in National Engineers Week.
- Participate in science fair projects.
- Visit Astro-Venture regularly to participate in chats and activities.
- Call the American Association of Science and Technology Centers for information on science museums in your area that you might visit (202) 783-7200.
- Order activity books, poster sets and **engineering** kits by writing to the Society of Manufacturing Engineers, One SME Drive, P.O. Box 930, Dearborn, MI 48121-0930.